Monthly Technical Status Report

LexEVS Operations and Maintenance

Subcontract No. 16X237

October 2016

September 1 – September 30, 2016

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Contents

A.   Technical Overview

LexEVS contract (No. 13XS500 – Modification 8) ended September 30th, 2016. Over the last year we focused much of our efforts on upgrading the LexEVS Lucene search engine. LexEVS 6.4 incorporates updated Lucene libraries, bringing the latest search engine technology to LexEVS and as such represents a major refactoring of the internal code base. Given the nature of the regular changes made to the Lucene API over the years this provided many challenges to the LexEVS development team, including a complete rewrite of the query building mechanism, concurrency code, and serialization techniques. However, this update made serious inroads into the technical debt incurred while this technology improved over the years.

Sprint 38 (September 1, 2016 - September 14, 2016) has been completed. In this sprint, LexEVS 6.4.1 documentation has been created on NCI's wiki. NCI's main LexEVS codebase has been updated with the latest changes committed in Git.   Development has started on the next LexEVS release. Investigation how to remove unused caCORE artifacts and the removal work was performed in this sprint. An OWL2 loader failure with the NCI Thesaurus was fixed. The remote LexEVS client tests were updated to ensure all tests pass. The overall lexevs system tests were updated for CentOS7 and Java8. Investigation to select an automated REST framework for the CTS2 REST services has also been completed.

Sprint 39 (September 15, 2016 - September 28, 2016) has been completed. In this sprint, NCI leadership signed off on the LexEVS 6.4.0/6.4.1 deliverables. The LexEVS builds were updated to pull maven artifacts from the NCI Nexus server. There were further refinements to the LexEVS 6.4.0/6.4.1 wiki documentation. The LexEVS remote client code base has been cleaned up and a prototype along with documentation for using the remote client has been developed. The option to run CTS2 over the LexEVS remote API has also been removed for future versions. During this sprint, we also had discussions with NCI about the future use of the current CTS2 REST service, possible additional REST services and triple stores to provide support for future LexEVS requirements.

Sprint 40 (September 29, 2016 - October 12, 2016) has been started, but there are no updates for this month.

We also provided continued product maintenance and deployment support across all sprints.

Please see the weekly meeting notes for details:

https://wiki.nci.nih.gov/display/LexEVS/LexEVS+6.3+and+6.4+Weekly+Meeting+Minutes

B.   Issues Resolved Over the Covered Period

Sprint	Activity	Description/Comments
Sprint 38	LexEVS 6.4 - Sprint 38	LexEVS 6.4 Sprint 38 Stories
Sprint 38	LEXEVS-1464	Remove caCORE (API artifacts)

Sprint	Activity	Description/Comments
Sprint 38	LEXEVS-2242	Create 6.4.1 documentation on Wiki
Sprint 38	LEXEVS-2244	Move LexEVS Maven Artifacts to NCI repository.
Sprint 38	LEXEVS-2245	OWL2 Loader fails when loading NCI Thesaurus
Sprint 38	LEXEVS-2256	Docker - Adjust lexevs regression tests with CentOS7 and Java 8
Sprint 38	LEXEVS-2270	I want all tests in Mavenised RMI LexEVS Client to Pass
Sprint 38	LEXEVS-2274	Investigate options to move Mayo's Maven repository over NCI's Maven repository
Sprint 38	LEXEVS-2277	Update NCI git repositories with FINAL tags from the lexevs git forks
Sprint 38	LEXEVSCTS2-55	Investigate options to automate lexevs-service (CTS2) integration testing.
Sprint 38	LEXEVSCTS2-56	Move LexEVS CTS2 Maven Artifacts to NCI repository.
Sprint 38	LEXEVSREM-11	Move Distributed Client Maven Artifacts to NCI repository.
Sprint 38	LEXEVSREM-12	API - Investigate - Remove caCORE (API artifacts)
Sprint 39	LexEVS 6.4 - Sprint 39	LexEVS 6.4 Sprint 39 Stories
Sprint 39	LEXEVS-2289	Documentation: Complete current contract documentation deliverables.
Sprint 39	LEXEVS-2292	Update current Lexevs builds to work with the Nexus Maven repository at NCI
Sprint 39	LEXEVS-2297	I would like to do code cleanup in the distributed client
Sprint 39	LEXEVS-2298	Create prototype and documentation for use of Distributed Client in maven project
Sprint 39	LEXEVS-2301	Documentation: Update LexEVS 6.4/6.4.1 wiki documentation
Sprint 39	LEXEVSCTS2-61	Remove CTS2 over RMI configuration option
Sprint 39	LEXEVSREM-15	Update Remote Services Scripts to remove unneeded artifact creation

C.   New Releases of the Software

Release	Description of the Release

D. Presentations, Documentation Updates, Community Communication

Activity	Description of the Activity
Combine LexEVS 6.4.0 and 6.4.1 wiki updates as one release (6.4.1). This includes updated pages as well as new pages.	• https://wiki.nci.nih.gov/display/LexEVS/LexEVS+Release+Notes • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+Installation+and+Downloads • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+Release+Notes • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+Release+Roadmap • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+6.4.1 • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+6.4.1+Functionality+Overview • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+6.4.1+Release+Highlights • https://wiki.nci.nih.gov/display/LexEVS/LexEVS+Software+Release+Identifiers

E. Outstanding Issues Being Actively Worked

Sprint	Activity/Issue	Description/Comments
Sprint 40	LexEVS 6.4 - Sprint 40	LexEVS 6.4 Sprint 40 Stories **Note: this will work will be part of the new contract that begins 10/01/2016.**
Sprint 40	CTS2FW-1	Update maven pom.xml to pull artifacts from the NCI Nexus Server
Sprint 40	CTS2FW-5	Create Git fork of the CTS2 Framework for LexEVS work
Sprint 40	LEXEVS-2313	Nexus: Update new builds to point to NCI's nexus server
Sprint 40	LEXEVS-2314	Nexus: Update Docker to include maven and ivy changes to point to the NCI Nexus server
Sprint 40	LEXEVS-2329	Nexus: Update ant build to pull artifacts from the NCI Nexus Server
Sprint 40	LEXEVS-2346	Implement Docker fix for Centos7 to have all LexEVS Systems Run

Sprint 40	LEXEVSCTS2-74	Nexus: Update maven pom.xml to pull artifacts from the NCI Nexus Server
Sprint 40	LEXEVSREM-19	Verify Deployment: Run Client project against Production when production URL goes live
Sprint 40	LEXEVSREM-20	Fix LexEVS Remote LexEVSService Test Issues

F.   Critical Risks or External Dependencies

Activity/Issue	Description to corrective activity/issue

G.   Status of Deliverables/Milestones Overview

We have created a project wiki site out on Confluence Wiki at:

- https://wiki.nci.nih.gov/pages/viewpage.action?pageId=238354574

We have created a JIRA agile board for the LexEVS 6.4 Lucene release at:

- https://tracker.nci.nih.gov/secure/RapidBoard.jspa?rapidView=374&view=planning.nodetail

This table of contents breaks out into different areas to capture the weekly meeting notes, monthly technical status reports, an area for documentation and a brief summary. This site will evolve throughout the lifecycle of this project.

H.   Status of Deliverables

Deliverable/Milestone	Delivery Date	Status
Program Management	09/30/2016	Complete
Maintenance of Software System	09/30/2016	Complete
Provide Technical Expertise	09/30/2016	Complete
Project Wiki	11/10/2014	Complete

Deliverable/Milestone	Delivery Date	Status
Monthly Technical Reports:		
October 2014	11/10/2014	Complete
November 2014	12/10/2014	Complete
December 2014	01/10/2015	Complete
January 2015	02/10/2015	Complete
February 2015	03/10/2015	Complete
March 2015	04/10/2015	Complete
April 2015	05/10/2015	Complete
May 2015	06/10/2015	Complete
June 2015	07/10/2015	Complete
July 2015	08/10/2015	Complete
August 2015	09/10/2015	Complete
September 2015	10/10/2015	Complete
October 2015	11/10/2015	Complete
November 2015	12/10/2015	Complete
December 2015	01/10/2016	Complete
January 2016	02/10/2016	Complete
February 2016	03/10/2016	Complete
March 2016	04/10/2016	Complete
April 2016	05/10/2016	Complete
May 2016	06/10/2016	Complete
June 2016	07/10/2016	Complete
July 2016	08/10/2016	Complete
August 2016	09/10/2016	Complete
September 2016	10/10/2016	Complete

Deliverable/Milestone	Delivery Date	Status
Monthly Financial Reports:		
October 2014	11/10/2014	Complete
November 2014	12/10/2014	Complete
December 2015	01/10/2015	Complete
January 2015	02/10/2015	Complete
February 2015	03/10/2015	Complete
March 2015	04/10/2015	Complete
April 2015	05/10/2015	Complete
May 2015	06/10/2015	Complete
June 2015	07/10/2015	Complete
July 2015	08/10/2015	Complete
August 2015	09/10/2015	Complete
September 2015	10/10/2015	Complete
October 2015	11/10/2015	Complete
November 2015	12/10/2015	Complete
December 2015	01/10/2016	Complete
January 2016	02/10/2016	Complete
February 2016	03/10/2016	Complete
March 2016	04/10/2016	Complete
April 2016	05/10/2016	Complete
May 2016	06/10/2016	Complete
June 2016	07/10/2016	Complete
July 2016	08/10/2016	Complete
August 2016	09/10/2016	Complete
September 2016	10/10/2016	Complete

I.   Description of Work/Activities Planned for the next Month

Activity	Description
New LexEVS contract to start on 10/01/2016	We will start work on the new LexEVS contract on 10/01/2016.

J.   Additional Reporting

None